### Mars Global Surveyor Radio Science Team Meeting

June 21-22 Toulouse, France

### **PLANS AND OPERATIONS**

**Aseel Anabtawi** 

#### Current

- Solar Conjunction
  - Last Measurement On DOY 174 / June 22 (Sequence MM051)
  - Resume Operations On DOY 195 / July 13 (Sequence MM053)
- No Ranging

#### Near Future

- Egress Measurements
  - Next Opportunity ON DOY 252 and 253 (September 8-9)
- Upgrade MMRS Operating System

### Egress Measurements - "Pitchover"

- Fixed-HGA mode caused the MOLA temperature to drop too low
- The new "pitchover" technique was approved
  - The spacecraft pitches such that the HGA is Earth-pointed for egress.
  - The pitchover is held until the NADIR deck is once again NADIR pointed.
  - At that time the spacecraft returns the HGA to autotracking for the remainder of the orbit.
- This significantly decreases the data loss for the other instruments.
- The MCR was approved for up to two sets of 12 egress measurements per month. The two sets would be within a week of one another.
- The 12 measurements provide a good longitude sampling.

- Gravity Statistics
  - Hours Tracked To Date: 8930 Hrs
    - Does not account for
      - Occultation and/or HGA Rewind Time
      - DSN Lockup Time
      - Signal Outage For Mode Changes

- Questions
- Open Issues
  - Extended Mission
  - RSR
- Concerns

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